

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/781, 059 A  
Source: IFW0  
Date Processed by STIC: 08/31/2006

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 08/31/2006

PATENT APPLICATION: US/10/781,059A

TIME: 09:08:18

Input Set : F:\substitute seqlisting 7326-132.TXT

Output Set: N:\CRF4\08312006\J781059A.raw

4 <110> APPLICANT: Spyridon Artavanis-Tsakonas  
 5 Huilin Qi  
 6 Matthew Rand  
 8 <120> TITLE OF INVENTION: ACTIVATED FORMS OF NOTCH AND METHODS  
 9 BASED THEREON  
 11 <130> FILE REFERENCE: 7326-132-999  
 13 <140> CURRENT APPLICATION NUMBER: 10/781,059A  
 14 <141> CURRENT FILING DATE: 2004-02-17  
 16 <150> PRIOR APPLICATION NUMBER: 09/121,457  
 17 <151> PRIOR FILING DATE: 1998-07-23  
 19 <150> PRIOR APPLICATION NUMBER: 08/899,232  
 20 <151> PRIOR FILING DATE: 1997-07-23  
 22 <160> NUMBER OF SEQ ID NOS: 4  
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 2471  
 28 <212> TYPE: PRT  
 29 <213> ORGANISM: Homo sapiens  
 31 <400> SEQUENCE: 1  
 32 Met Pro Ala Leu Arg Pro Ala Leu Leu Trp Ala Leu Leu Ala Leu Trp  
 33 1 5 10 15  
 34 Leu Cys Cys Ala Ala Pro Ala His Ala Leu Gln Cys Arg Asp Gly Tyr  
 35 20 25 30  
 36 Glu Pro Cys Val Asn Glu Gly Met Cys Val Thr Tyr His Asn Gly Thr  
 37 35 40 45  
 38 Gly Tyr Cys Lys Cys Pro Glu Gly Phe Leu Gly Glu Tyr Cys Gln His  
 39 50 55 60  
 40 Arg Asp Pro Cys Glu Lys Asn Arg Cys Gln Asn Gly Gly Thr Cys Val  
 41 65 70 75 80  
 42 Ala Gln Ala Met Leu Gly Lys Ala Thr Cys Arg Cys Ala Ser Gly Phe  
 43 85 90 95  
 44 Thr Gly Glu Asp Cys Gln Tyr Ser Thr Ser His Pro Cys Phe Val Ser  
 45 100 105 110  
 46 Arg Pro Cys Leu Asn Gly Gly Thr Cys His Met Leu Ser Arg Asp Thr  
 47 115 120 125  
 48 Tyr Glu Cys Thr Cys Gln Val Gly Phe Thr Gly Lys Glu Cys Gln Trp  
 49 130 135 140  
 50 Thr Asp Ala Cys Leu Ser His Pro Cys Ala Asn Gly Ser Thr Cys Thr  
 51 145 150 155 160  
 52 Thr Val Ala Asn Gln Phe Ser Cys Lys Cys Leu Thr Gly Phe Thr Gly  
 53 165 170 175  
 54 Gln Lys Cys Glu Thr Asp Val Asn Glu Cys Asp Ile Pro Gly His Cys  
 55 180 185 190

CP9-6)

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56 Gln His Gly Gly Thr Cys Leu Asn Leu Pro Gly Ser Tyr Gln Cys Gln
57      195                200                205
58 Cys Pro Gln Gly Phe Thr Gly Gln Tyr Cys Asp Ser Leu Tyr Val Pro
59      210                215                220
60 Cys Ala Pro Ser Pro Cys Val Asn Gly Gly Thr Cys Arg Gln Thr Gly
61 225                230                235                240
62 Asp Phe Thr Phe Glu Cys Asn Cys Leu Pro Gly Phe Glu Gly Ser Thr
63      245                250                255
64 Cys Glu Arg Asn Ile Asp Asp Cys Pro Asn His Arg Cys Gln Asn Gly
65      260                265                270
66 Gly Val Cys Val Asp Gly Val Asn Thr Tyr Asn Cys Arg Cys Pro Pro
67      275                280                285
68 Gln Trp Thr Gly Gln Phe Cys Thr Glu Asp Val Asp Glu Cys Leu Leu
69      290                295                300
70 Gln Pro Asn Ala Cys Gln Asn Gly Gly Thr Cys Ala Asn Arg Asn Gly
71 305                310                315                320
72 Gly Tyr Gly Cys Val Cys Val Asn Gly Trp Ser Gly Asp Asp Cys Ser
73      325                330                335
74 Glu Asn Ile Asp Asp Cys Ala Phe Ala Ser Cys Thr Pro Gly Ser Thr
75      340                345                350
76 Cys Ile Asp Arg Val Ala Ser Phe Ser Cys Met Cys Pro Glu Gly Lys
77      355                360                365
78 Ala Gly Leu Leu Cys His Leu Asp Asp Ala Cys Ile Ser Asn Pro Cys
79      370                375                380
80 His Lys Gly Ala Leu Cys Asp Thr Asn Pro Leu Asn Gly Gln Tyr Ile
81 385                390                395                400
82 Cys Thr Cys Pro Gln Gly Tyr Lys Gly Ala Asp Cys Thr Glu Asp Val
83      405                410                415
84 Asp Glu Cys Ala Met Ala Asn Ser Asn Pro Cys Glu His Ala Gly Lys
85      420                425                430
86 Cys Val Asn Thr Asp Gly Ala Phe His Cys Glu Cys Leu Lys Gly Tyr
87      435                440                445
88 Ala Gly Pro Arg Cys Glu Met Asp Ile Asn Glu Cys His Ser Asp Pro
89      450                455                460
90 Cys Gln Asn Asp Ala Thr Cys Leu Asp Lys Ile Gly Gly Phe Thr Cys
91 465                470                475                480
92 Leu Cys Met Pro Gly Phe Lys Gly Val His Cys Glu Leu Glu Ile Asn
93      485                490                495
94 Glu Cys Gln Ser Asn Pro Cys Val Asn Asn Gly Gln Cys Val Asp Lys
95      500                505                510
96 Val Asn Arg Phe Gln Cys Leu Cys Pro Pro Gly Phe Thr Gly Pro Val
97      515                520                525
98 Cys Gln Ile Asp Ile Asp Asp Cys Ser Ser Thr Pro Cys Leu Asn Gly
99      530                535                540
100 Ala Lys Cys Ile Asp His Pro Asn Gly Tyr Glu Cys Gln Cys Ala Thr
101 545                550                555                560
102 Gly Phe Thr Gly Val Leu Cys Glu Glu Asn Ile Asp Asn Cys Asp Pro
103      565                570                575
104 Asp Pro Cys His His Gly Gln Cys Gln Asp Gly Ile Asp Ser Tyr Thr

```

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105		580		585		590
106	Cys Ile Cys	Asn Pro Gly Tyr Met	Gly Ala Ile Cys	Ser Asp Gln Ile		
107		595		600		605
108	Asp Glu Cys	Tyr Ser Ser Pro Cys	Leu Asn Asp Gly	Arg Cys Ile Asp		
109		610		615		620
110	Leu Val Asn	Gly Tyr Gln Cys Asn	Cys Gln Pro Gly	Thr Ser Gly Val		
111	625		630		635	640
112	Asn Cys Glu	Ile Asn Phe Asp Asp	Cys Ala Ser Asn	Pro Cys Ile His		
113		645		650		655
114	Gly Ile Cys	Met Asp Gly Ile Asn	Arg Tyr Ser Cys	Val Cys Ser Pro		
115		660		665		670
116	Gly Phe Thr	Gly Gln Arg Cys Asn	Ile Asp Ile Asp	Glu Cys Ala Ser		
117		675		680		685
118	Asn Pro Cys	Arg Lys Gly Ala Thr	Cys Ile Asn Gly	Val Asn Gly Phe		
119		690		695		700
120	Arg Cys Ile	Cys Pro Glu Gly Pro	His His Pro Ser	Cys Tyr Ser Gln		
121	705		710		715	720
122	Val Asn Glu	Cys Leu Ser Asn Pro	Cys Ile His Gly	Asn Cys Thr Gly		
123		725		730		735
124	Gly Leu Ser	Gly Tyr Lys Cys Leu	Cys Asp Ala Gly	Trp Val Gly Ile		
125		740		745		750
126	Asn Cys Glu	Val Asp Lys Asn Glu	Cys Leu Ser Asn	Pro Cys Gln Asn		
127		755		760		765
128	Gly Gly Thr	Cys Asp Asn Leu Val	Asn Gly Tyr Arg	Cys Thr Cys Lys		
129		770		775		780
130	Lys Gly Phe	Lys Gly Tyr Asn Cys	Gln Val Asn Ile	Asp Glu Cys Ala		
131	785		790		795	800
132	Ser Asn Pro	Cys Leu Asn Gln Gly	Thr Cys Phe Asp	Asp Ile Ser Gly		
133		805		810		815
134	Tyr Thr Cys	His Cys Val Leu Pro	Tyr Thr Gly Lys	Asn Cys Gln Thr		
135		820		825		830
136	Val Leu Ala	Pro Cys Ser Pro Asn	Pro Cys Glu Asn	Ala Ala Val Cys		
137		835		840		845
138	Lys Glu Ser	Pro Asn Phe Glu Ser	Tyr Thr Cys Leu	Cys Ala Pro Gly		
139		850		855		860
140	Trp Gln Gly	Gln Arg Cys Thr Ile	Asp Ile Asp Glu	Cys Ile Ser Lys		
141	865		870		875	880
142	Pro Cys Met	Asn His Gly Leu Cys	His Asn Thr Gln	Gly Ser Tyr Met		
143		885		890		895
144	Cys Glu Cys	Pro Pro Gly Phe Ser	Gly Met Asp Cys	Glu Glu Asp Ile		
145		900		905		910
146	Asp Asp Cys	Leu Ala Asn Pro Cys	Gln Asn Gly Gly	Ser Cys Met Asp		
147		915		920		925
148	Gly Val Asn	Thr Phe Ser Cys Leu	Cys Leu Pro Gly	Phe Thr Gly Asp		
149		930		935		940
150	Lys Cys Gln	Thr Asp Met Asn Glu	Cys Leu Ser Glu	Pro Cys Lys Asn		
151	945		950		955	960
152	Gly Gly Thr	Cys Ser Asp Tyr Val	Asn Ser Tyr Thr	Cys Lys Cys Gln		
153		965		970		975

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```

154 Ala Gly Phe Asp Gly Val His Cys Glu Asn Asn Ile Asn Glu Cys Thr
155          980          985          990
156 Glu Ser Ser Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser
157          995          1000          1005
158 Phe Ser Cys Leu Cys Pro Val Gly Phe Thr Gly Ser Phe Cys Leu His
159          1010          1015          1020
160 Glu Ile Asn Glu Cys Ser Ser His Pro Cys Leu Asn Glu Gly Thr Cys
161 1025          1030          1035          1040
162 Val Asp Gly Leu Gly Thr Tyr Arg Cys Ser Cys Pro Leu Gly Tyr Thr
163          1045          1050          1055
164 Gly Lys Asn Cys Gln Thr Leu Val Asn Leu Cys Ser Arg Ser Pro Cys
165          1060          1065          1070
166 Lys Asn Lys Gly Thr Cys Val Gln Lys Lys Ala Glu Ser Gln Cys Leu
167          1075          1080          1085
168 Cys Pro Ser Gly Trp Ala Gly Ala Tyr Cys Asp Val Pro Asn Val Ser
169          1090          1095          1100
170 Cys Asp Ile Ala Ala Ser Arg Arg Gly Val Leu Val Glu His Leu Cys
171 1105          1110          1115          1120
172 Gln His Ser Gly Val Cys Ile Asn Ala Gly Asn Thr His Tyr Cys Gln
173          1125          1130          1135
174 Cys Pro Leu Gly Tyr Thr Gly Ser Tyr Cys Glu Glu Gln Leu Asp Glu
175          1140          1145          1150
176 Cys Ala Ser Asn Pro Cys Gln His Gly Ala Thr Cys Ser Asp Phe Ile
177          1155          1160          1165
178 Gly Gly Tyr Arg Cys Glu Cys Val Pro Gly Tyr Gln Gly Val Asn Cys
179          1170          1175          1180
180 Glu Tyr Glu Val Asp Glu Cys Gln Asn Gln Pro Cys Gln Asn Gly Gly
181 1185          1190          1195          1200
182 Thr Cys Ile Asp Leu Val Asn His Phe Lys Cys Ser Cys Pro Pro Gly
183          1205          1210          1215
184 Thr Arg Gly Leu Leu Cys Glu Glu Asn Ile Asp Asp Cys Ala Arg Gly
185          1220          1225          1230
186 Pro His Cys Leu Asn Gly Gly Gln Cys Met Asp Arg Ile Gly Gly Tyr
187          1235          1240          1245
188 Ser Cys Arg Cys Leu Pro Gly Phe Ala Gly Glu Arg Cys Glu Gly Asp
189          1250          1255          1260
190 Ile Asn Glu Cys Leu Ser Asn Pro Cys Ser Ser Glu Gly Ser Leu Asp
191 1265          1270          1275          1280
192 Cys Ile Gln Leu Thr Asn Asp Tyr Leu Cys Val Cys Arg Ser Ala Phe
193          1285          1290          1295
194 Thr Gly Arg His Cys Glu Thr Phe Val Asp Val Cys Pro Gln Met Pro
195          1300          1305          1310
196 Cys Leu Asn Gly Gly Thr Cys Ala Val Ala Ser Asn Met Pro Asp Gly
197          1315          1320          1325
198 Phe Ile Cys Arg Cys Pro Pro Gly Phe Ser Gly Ala Arg Cys Gln Ser
199          1330          1335          1340
200 Ser Cys Gly Gln Val Lys Cys Arg Lys Gly Glu Gln Cys Val His Thr
201 1345          1350          1355          1360
202 Ala Ser Gly Pro Arg Cys Phe Cys Pro Ser Pro Arg Asp Cys Glu Ser

```

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Input Set : F:\substitute seqlisting 7326-132.TXT

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```

203          1365          1370          1375
204 Gly Cys Ala Ser Ser Pro Cys Gln His Gly Gly Ser Cys His Pro Gln
205          1380          1385          1390
206 Arg Gln Pro Pro Tyr Tyr Ser Cys Gln Cys Ala Pro Pro Phe Ser Gly
207          1395          1400          1405
208 Ser Arg Cys Glu Leu Tyr Thr Ala Pro Pro Ser Thr Pro Pro Ala Thr
209          1410          1415          1420
210 Cys Leu Ser Gln Tyr Cys Ala Asp Lys Ala Arg Asp Gly Val Cys Asp
211 1425          1430          1435          1440
212 Glu Ala Cys Asn Ser His Ala Cys Gln Trp Asp Gly Gly Asp Cys Ser
213          1445          1450          1455
214 Leu Thr Met Glu Asn Pro Trp Ala Asn Cys Ser Ser Pro Leu Pro Cys
215          1460          1465          1470
216 Trp Asp Tyr Ile Asn Asn Gln Cys Asp Glu Leu Cys Asn Thr Val Glu
217          1475          1480          1485
218 Cys Leu Phe Asp Asn Phe Glu Cys Gln Gly Asn Ser Lys Thr Cys Lys
219          1490          1495          1500
220 Tyr Asp Lys Tyr Cys Ala Asp His Phe Lys Asp Asn His Cys Asn Gln
221 1505          1510          1515          1520
222 Gly Cys Asn Ser Glu Glu Cys Gly Trp Asp Gly Leu Asp Cys Ala Ala
223          1525          1530          1535
224 Asp Gln Pro Glu Asn Leu Ala Glu Gly Thr Leu Val Ile Val Val Leu
225          1540          1545          1550
226 Met Pro Pro Glu Gln Leu Leu Gln Asp Ala Arg Ser Phe Leu Arg Ala
227          1555          1560          1565
228 Leu Gly Thr Leu Leu His Thr Asn Leu Arg Ile Lys Arg Asp Ser Gln
229          1570          1575          1580
230 Gly Glu Leu Met Val Tyr Pro Tyr Tyr Gly Glu Lys Ser Ala Ala Met
231 1585          1590          1595          1600
232 Lys Lys Gln Arg Met Thr Arg Arg Ser Leu Pro Gly Glu Gln Glu Gln
233          1605          1610          1615
234 Glu Val Ala Gly Ser Lys Val Phe Leu Glu Ile Asp Asn Arg Gln Cys
235          1620          1625          1630
236 Val Gln Asp Ser Asp His Cys Phe Lys Asn Thr Asp Ala Ala Ala Ala
237          1635          1640          1645
238 Leu Leu Ala Ser His Ala Ile Gln Gly Thr Leu Ser Tyr Pro Leu Val
239          1650          1655          1660
240 Ser Val Val Ser Glu Ser Leu Thr Pro Glu Arg Thr Gln Leu Leu Tyr
241 1665          1670          1675          1680
242 Leu Leu Ala Val Ala Val Val Ile Ile Leu Phe Ile Ile Leu Leu Gly
243          1685          1690          1695
244 Val Ile Met Ala Lys Arg Lys Arg Lys His Gly Ser Leu Trp Leu Pro
245          1700          1705          1710
246 Glu Gly Phe Thr Leu Arg Arg Asp Ala Ser Asn His Lys Arg Arg Glu
247          1715          1720          1725
248 Pro Val Gly Gln Asp Ala Val Gly Leu Lys Asn Leu Ser Val Gln Val
249          1730          1735          1740
250 Ser Glu Ala Asn Leu Ile Gly Thr Gly Thr Ser Glu His Trp Val Asp
251 1745          1750          1755          1760

```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 08/31/2006  
PATENT APPLICATION:    US/10/781,059A      TIME: 09:08:19

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Output Set: N:\CRF4\08312006\J781059A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 891,1763,1787

VERIFICATION SUMMARY

DATE: 08/31/2006

PATENT APPLICATION: US/10/781,059A

TIME: 09:08:19

Input Set : F:\substitute seqlisting 7326-132.TXT

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L:475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:880

M:341 Repeated in SeqNo=2